

Initial Study and Proposed Negative Declaration

Water Purchase Agreement Between Kern County Water Agency and the California Department of Water Resources for the Environmental Water Account

(This document is tiered from the CALFED Programmatic EIS/EIR, certified/Record of Decision issued August 2000, pursuant to CEQA Guidelines Section 15152.)

**State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES**

February 8, 2001

State of California
The Resources Agency
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PROPOSED NEGATIVE DECLARATION

Water Purchase Agreement Between Kern County Water Agency and the California
Department of Water Resources for the Environmental Water Account

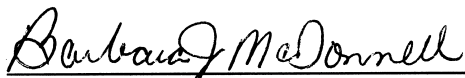
Project Description: The Department will purchase banked groundwater supplied by the Kern County Water Agency (KCWA) in 2001 upon completion of an agreement between the Department and KCWA. Under the agreement, a maximum of 30,000 acre-feet could be delivered. The water will come from existing banked groundwater accounts managed by KCWA. The amount to be purchased is dependent upon KCWA's 2001 SWP allocation. A portion of the banked water is owned by Nickel Family LLC and KCWA's Improvement District No. 4. KCWA will act on their behalf by entering into the purchase agreement and delivering or storing the water allocated to the Department. The recovery of the purchased groundwater by the Department would involve delivery into O'Neill Forebay by an exchange of SWP entitlement and/or direct pump-back into the California Aqueduct. As another option, the Department may store all or a portion of the purchased water through one of the Kern Water Bank storage agreements that are in place for EWA. No new facilities will be constructed under this project.

The Finding: The project will not have a significant negative impact on the environment.

Basis for Finding: KCWA will ensure that it has adequate supply and capacity to meet local contracted water supply while EWA water is being transferred. The water levels in San Luis Reservoir and the Kern County Goundwater Basin will remain within normal operational levels such that adverse environmental effects such as groundwater overdraft, erosion, subsidence, dust, excessive power use, or water supply problems will not occur.

Therefore, this Negative Declaration is filed pursuant to Section 15070 et seq. of the California Code of Regulations (CEQA Guidelines) for Implementation of the California Environmental Quality Act.

The public review period for this proposed Negative Declaration and Initial Study will end April 5, 2001. All comments or questions should be directed to DWR Delores Brown, 3251 "S" Street, Sacramento, CA 95816-7017 (916/227-2407 and fax 916/227-7554). Copies of the Initial Study are available at the above address and on the CALFED website http://calfed.ca.gov/environmental_docs/EWA.html.



Barbara J. McDonnell
Chief, Environmental Services Office

Date March 8, 2001

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Initial Study

Water Purchase Agreement Between Kern County Water Agency and the California Department of Water Resources for the Environmental Water Account

I. INTRODUCTION

The CALFED Bay-Delta Program identified a long-term comprehensive plan to restore the ecological health and improve water management for beneficial uses of the San Francisco Bay/Sacramento-San Joaquin Delta (Delta) estuary system when it issued the Record of Decision for its *Final Programmatic Environmental Impact Statement/Environmental Impact Report* in August 2000. The Long term plan provides lead agencies, responsible agencies, and stakeholder agencies a starting point from which a range of actions can be specifically reviewed, evaluated, and carried out.

The CALFED PEIS/EIR presented the general environmental consequences of the long-term plan. This Initial Study, tiered from the PEIS/EIR, addresses the specific impacts from implementing the water purchase agreement between Kern County Water Agency (KCWA) and the California Department of Water Resources (Department) for the Environmental Water Account (EWA). Appendix A¹ describes the proposed four year EWA program and identifies other individual assets that will be used to create the EWA, as specified in the CALFED Bay-Delta Program Record of Decision (ROD), dated August 28, 2000. Additional California Environmental Quality Act (CEQA) compliance documents are being prepared for these assets. Under the EWA, assets acquired will be used to efficiently manage water for environmental purposes while decreasing conflicts in use of water in the Bay-Delta estuary. By using a more flexible means of managing water operations, existing fish protection measures and the implementation of the EWA will achieve substantial fish protection and recovery opportunities and may potentially provide improvements in water supply reliability and water quality.

Purpose and Need for Action

EWA Program Purpose and Need

The purpose of the CALFED Bay-Delta Program is to develop and implement a long-term comprehensive plan that restores ecological health and improves water management for beneficial uses in the Bay-Delta system. To practicably achieve this program purpose, CALFED will concurrently and comprehensively address problems of the Bay-Delta system within each of four resource categories: ecosystem quality, water quality, water supply reliability, and levee system integrity. CALFED identified a need in the Record of Decision for additional fisheries protection measures above and beyond the baseline regulatory measures to speed recovery of listed fish species. The overall

¹ Appendix A contains an overview of the four year EWA program.

purpose of the EWA is to promote flexible water project management to provide additional protection and recovery of the fisheries of the San Francisco Bay/Sacramento-San Joaquin Delta estuary. To accomplish this purpose, the EWA will incorporate environmentally beneficial changes to the operation of the State Water Project (SWP) and the Central Valley Project (CVP), at no water cost to the projects' water users. The EWA, therefore, serves to meet CALFED's objectives for ecosystem quality, without affecting water supply reliability.

The EWA is intended to provide sufficient protections, combined with the Ecosystem Restoration Program and the regulatory baseline, to address CALFED's ecosystem quality needs in the areas of fishery protection, restoration, and recovery. This approach to fish protection requires the acquisition of alternative sources of project water supply, called "EWA assets" which will be used to:

- augment streamflows and Delta outflows;
- modify exports to provide fishery benefits during critical life history periods; and
- replace project water supply interrupted by the changes to project operations.

The EWA will not be used to meet any new regulatory requirements under statutes other than the Federal Endangered Species Act and the California Endangered Species Act.

The EWA is a cooperative management program involving five CALFED agencies that have responsibility for implementing the EWA. The three Management Agencies, the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the California Department of Fish and Game (DFG), have primary responsibility for managing the EWA assets and exercising their biological judgment to determine what SWP/CVP operational changes are beneficial to the Bay-Delta ecosystem and/or the long-term survival of fish species, including those listed under the State and Federal Endangered Species Acts. The two Project Agencies are the U.S. Bureau of Reclamation (Reclamation) and the California Department of Water Resources (Department). The Project Agencies will cooperate with the Management Agencies in administering the EWA, including banking, borrowing, transferring, selling, and arranging for the conveyance of EWA assets, and making the operational changes proposed by the Management Agencies. The EWA will be in effect for the first four years of Stage 1² of the CALFED Bay-Delta Program. The Department will be responsible for acquiring EWA assets for the first year (2001). After the first year, acquisitions may be made using a public process that may employ other agencies or third parties to acquire assets.

For the first year, State funds and State facilities will be used to create an operable EWA. During years two through four of the EWA, both federal and State actions will be required to maintain the EWA. CEQA compliance will occur for all first year actions to create the

² Stage 1 implementation covers the first seven years of implementation of the CALFED 30-year program and builds the foundation for long-term actions. The Stage 1 actions to implement the Preferred Program Alternative are described in the Record of Decision. These actions are dependent upon subsequent project-specific environmental analyses as well as on subsequent review of financial and legislative proposals by the State and Federal executive branches, Congress and the State Legislature.

EWA (Appendix B)³. CEQA and NEPA compliance will be accomplished for EWA actions implemented in years two through four.

Project Specific Purpose and Need

The purpose of the water purchase agreement between KCWA and the Department is to provide a portion of the assets (Appendix B) through the purchase of alternative sources of water south of the Delta that will allow operational flexibility. This individual agreement is needed because it provides a necessary component of the overall EWA that reduces the need to pump water from the Delta during June and July to avoid high levels of entrainment of sensitive species, such as delta smelt and splittail and sensitive salmonids.

Scheduling Use of EWA Assets during Water Year 2001

The timing of targeted fishery resources within the affected streams will depend on a number of environmental factors (photoperiod, Delta outflow, temperature, etc). The periods of greatest vulnerability to aquatic resources in the Delta vary from year to year. Coordination through the CALFED Operations⁴ Group and the (b)(2) Implementation Team⁵ meetings will be conducted monthly to optimize all environmental water for fishery benefits. Using an adaptive management approach, EWA assets will be scheduled by the Management Agencies in coordination with the Project Agencies. Decisions designed to protect species such as chinook salmon, Delta smelt, and splittail will be made based on real-time assessments of relative risk and benefit. The following operational scenario could be used for Water Year 2001 EWA and (b)(2) actions. It should be emphasized that the following example is highly provisional; actual actions will be based upon biological factors and hydrologic conditions. Starting in December, a number of upstream and Delta planned actions could be implemented.

As early as December 2000, the Management Agencies may initiate Delta pumping cutbacks when fish are in the vicinity of the export pumps. As the cutbacks occur, the Management Agencies will release EWA assets to the Project Agencies to allow continued delivery of water supplies to water contractors. These planned actions could include adjusting the allowable export-to-inflow ratio to pump water for the EWA.

In January, actions would focus on improving the survival of juvenile salmon emigrating through the Delta. This would be accomplished by curtailing project exports during critical periods to increase the survival of juvenile salmon. The timing and duration would be determined by a combination of biological factors.

³ Appendix B contains an overview of proposed EWA first year operations.

⁴ CALFED Operations Group: The CALFED Ops group is charged with coordinating the operation of the water projects with requirements of the CALFED Framework Agreement, the December 15, 1994 Principles of Agreement for the Bay-Delta Estuary and the State Water Resources Control Board Water Right decision 1641. DWR, USBR, NMFS, USFWS, EPA, DFG and SWRCB staff comprise the Ops group.

⁵ (b)(2) Implementation Team: The (b)(2) Implementation Team implements the Central Valley Project Improvement Act Section 3406 (b)(2) reallocating 800,000 acre-feet of water for environmental purposes. Representatives of the USBR, USFWS, NMFS, DFG and DWR serve on the team.

To ensure survival of sensitive fish species, during February and March, the projects would curtail exports when fish densities are high near the pumps. The anticipated amount of curtailment is about 50,000 acre-feet. In dry conditions, exports would not be as high and there would be no need to curtail pumping.

In April and May both (b)(2) and EWA assets would be used to reduce exports before and after the VAMP⁶ period. Assets would also be used to fill San Luis Reservoir.

During June and July exports could be reduced to avoid high salvage of sensitive species, such as delta smelt and splittail. EWA assets would be released to compensate for such actions. For the most part, upstream actions during water year 2001 would involve water releases from reservoirs to improve instream flow conditions for migration, spawning, egg incubation, rearing, and juvenile emigration of anadromous fish.

In April and May both (b)(2) and EWA assets would be used if exports are reduced before and after the VAMP⁷ period. Assets would also be used to reduce the drawdown of San Luis Reservoir.

During June and July exports could be reduced to avoid high levels of entrainment of sensitive species, such as delta smelt and splittail. EWA water would be made available to compensate for those export reductions. For the most part, upstream actions during water year 2001 would involve water releases from reservoirs to improve instream flow conditions for migration, spawning, egg incubation, rearing, and juvenile emigration of anadromous fish.

⁶ Vernalis Adaptive Management Program (VAMP): Under dry conditions (90% hydrology), CVP and SWP exports will be reduced to a combined total of 1,500 cfs for 31 days. Under normal conditions (50% hydrology), exports will be reduced to 2,250 cfs for 3 days. The reduction will be accomplished using a combination of (b)(2) and EWA assets. For example, (b)(2) will be used to reduce CVP exports and SWP exports from the "2:1" level contained in the delta smelt biological opinion down to the SWP share of the export objective during the VAMP period. The difference between "1:1" and "2:1" will be covered by the EWA.

⁷ Vernalis Adaptive Management Program (VAMP): Under dry conditions (90 percent hydrology), CVP and SWP exports will be reduced to a combined total of 1,500 cfs for 31 days. Under normal conditions (50 percent hydrology), exports will be reduced to 2,250 cfs for 3 days. The reduction will be accomplished using a combination of (b)(2) and EWA assets. For example, (b)(2) will be used to reduce CVP exports and SWP exports from the "2:1" level contained in the delta smelt biological opinion down to the SWP share of the export objective during the VAMP period. The difference between "1:1" and "2:1" will be covered by the EWA.

CEQA Compliance

The California Environmental Quality Act, California Public Resources Code sections 21000 et. seq. (CEQA) requires that prior to deciding to implement a project, environmental effects of the project must be described and appropriately addressed. CEQA provides for tiering environmental documents. This document tiers from the CALFED Programmatic EIS/EIR, has considered information, analysis and conclusions of the EIS/EIR, and incorporates the EIS/EIR by reference. This document also incorporates by reference the Final Environmental Impact Report for the Artificial Recharge, Storage and Overdraft Correction Program, Kern County, California (Kern Water Bank) (Department of Water Resources 1986).

The documentation for acquiring individual EWA assets during the first year will be evaluated using either an Initial Study, Negative Declaration, Mitigated Negative Declaration, Supplemental Environmental Impact Report or deemed exempt. This Initial Study and proposed Negative Declaration were prepared to comply with the provisions of CEQA. The direct, indirect, and cumulative effects of the 2001 water purchase will be examined under this initial study.

The purpose of this Initial Study is to provide decision makers, public agencies, and the general public with an objective and informative document that fully discloses any potential impacts including mitigation associated with impacts that could be caused by the project. All phases of project planning, implementation, and operation were considered in the Initial Study of this project. The following explanation is provided to assist the reader in locating the sections where these subjects are discussed. The Project Description Section discusses actions to be taken to secure a particular water supply as part of the EWA. The Project Location Section describes the major project features. Environmental Setting and Potential Environmental Impacts Sections describe the existing environmental resources and analyzes potential impacts of the project on those resources.

II. PROJECT DESCRIPTION FOR THE WATER PURCHASE AGREEMENT BETWEEN KERN COUNTY WATER AGENCY AND THE CALIFORNIA DEPARTMENT OF WATER RESOURCES

The Department will purchase banked groundwater supplied by the Kern County Water Agency (KCWA) in 2001 upon completion of an agreement between the Department and KCWA. Under the agreement, a maximum of 30,000 acre-feet could be delivered. The water will come from existing groundwater accounts held under the Kern Water Bank and the Pioneer Groundwater Recharge and Recovery Project (Pioneer Project). The amount to be purchased is dependent upon KCWA's 2001 SWP allocation (Table 1). Half of the water is banked SWP water owned and managed by KCWA and KCWA's Improvement District No. 4 (ID4). The remainder is banked Lower Kern River Water owned by Nickel Family LLC (Nickel) that was acquired from ID4 and KCWA through previous exchanges. KCWA manages the Kern Water Bank and Pioneer Project, and will act on the behalf of Nickel and ID4 by entering into the purchase agreement and delivering or storing the water allocated to the Department.

Table 1. Acre-feet (AF) of water that will be made available to the Department in relation to KCWA's SWP allocation

2001 SWP Allocation %	Banked Lower Kern River Water AF	Banked SWP Water, AF	Total Water, AF
90-100	15,000	15,000	30,000
60-80	15,000	10,000	25,000
30-50	10,000	10,000	20,000
0-20	10,000	0	10,000

The recovery of the purchased groundwater by the Department would involve delivery into O'Neill Forebay by an exchange of SWP entitlement and/or direct pump-back into the California Aqueduct. As another option, the Department may store all or a portion of the purchased water under one of the Kern Water Bank storage agreements that are in place for EWA. The amount or timing of water delivered or stored for water users within the KCWA's service area will not be changed by implementation of the project. Storage of and delivery of EWA water by the KCWA is subject to the water rights and needs of users within KCWA's service areas. No new facilities will be constructed under this project.

As specified in the CALFED Bay-Delta Program Record of Decision dated August 28, 2000, the EWA would use the water to promote flexible water project management to provide additional protection and recovery of the fisheries of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

III. PROJECT LOCATION

The man-made and natural water storage and conveyance systems affected by the project are located in California ranging from the Delta and the Sacramento Valley to Kern County and the southern San Joaquin Valley.

Sacramento-San Joaquin Delta

The Delta, located at the confluence of the Sacramento and San Joaquin Rivers, serves as the major hub for the operations of both CVP and SWP. CVP operates its Tracy Pumping Plant to lift water from the southern Delta into the Delta-Mendota Canal to service CVP contractors in the San Joaquin Valley and the Tulare Basin. SWP operates its Banks Pumping Plant in the southern Delta to lift water into the California Aqueduct for delivery to SWP customers⁸ in the San Joaquin Valley and to southern California. Current SWP and CVP operations in the Delta are governed by a series of regulations and agreements with SWRCB, USFWS, NMFS, and DFG. These regulations and agreements limit the volume of water that can be exported from the Delta based on Delta hydrodynamics, water quality, and potential impacts on fisheries as determined by fish abundance monitoring at the pumps.

Water conditions in the south Delta area are influenced in varying degrees by natural tidal fluctuation, San Joaquin River flow and quality, local agricultural drainage water, CVP and SWP export pumping, local diversions, Delta Cross Channel and tidal barrier facilities operations, inadequate channel capacity, and regulatory constraints. These factors affect water levels and availability at some local diversion points. When CVP and SWP are exporting water under certain conditions, water levels in local south Delta channels may be lowered. Also, diverging and converging flows can occur in some channels. If local agricultural drainage water is pumped into the channels where circulation is poor, such as shallow, stagnant, or dead-end channels, water quality can be affected. The South Delta Temporary Barriers Project, initiated in 1991, has been used to provide short-term improvements of water conditions for the south Delta. The program involves the seasonal installation of four barriers: one in Middle River, two in Old River, and one in Grant Line Canal. Three of the barriers are designed to improve water levels and circulation for agricultural diversions. These barriers are installed by the Department and Reclamation on a seasonal basis as needed to improve water levels and water quality.

O'Neill Forebay

O'Neill Forebay is the forebay to the San Luis Reservoir and is located along the western side of the San Joaquin Valley in Merced County. O'Neill Forebay receives water from the California Aqueduct (Figure 1) to the north and from the federal Delta-Mendota Canal to the east. It has a maximum operating storage volume of 56,430 acre-feet. O'Neill Forebay offers a variety of recreational activities including camping, boating, windsurfing, and fishing.

⁸ Figures 1 and 2 show major SWP features and contracting agencies, respectively.

San Luis Reservoir

The San Luis Reservoir is located in the eastern foothills of the Diablo Mountain Range in central California (Figure 1). It is part of the State-federal San Luis Joint-Use Complex, which includes O'Neill Forebay. The Reservoir holds water diverted from the Sacramento-San Joaquin River Delta for subsequent delivery to CVP and SWP contractors (Figure 2) in the San Joaquin Valley, Southern California, and the federal San Felipe Project. San Luis Reservoir water is used to supplement supplies during periods of constrained operations in the Delta and when demands exceed maximum capacity at State and Federal Delta pumps. The San Luis Reservoir has a capacity of 2,041,000 acre-feet, of which approximately 1 million acre-feet is the State's share.

Kern County Water Agency and the Kern Water Bank

KCWA is the second largest SWP contractor (Figure 2). It receives agricultural (approximately 980,000 acre-feet per year), municipal, and industrial (approximately 134,000 acre-feet per year) SWP entitlements. KCWA owns and operates the Kern Water Bank, Pioneer Project (Figure 3), and the Berrenda Mesa Project. KCWA serves as a wholesaler and distributes water to the following thirteen local water districts:

Belridge Water Storage District
Berrenda Mesa Water District
Buena Vista Water Storage District
Cawelo Water District
Henry Miller Water District
Kern Delta Water Storage District
Lost Hills Water District
Rosedale Rio-Bravo Water Storage District
Semitropic Irrigation District
Tehachapi Cummings County Water District
Tejon Castaic Water District
West Kern Water District
Wheeler Ridge-Maricopa Water Storage District

ID4 is an improvement district formed by KCWA, with boundaries that incorporate the greater Bakersfield area. ID4 has a SWP entitlement of about 87,000 acre-feet. It supplies about 30,000 acre-feet per year to a water treatment plant that supplies wholesale treated water to water retailers that serve the greater Bakersfield area. The balance of the water is recharged within ID4's boundaries to offset overdraft. When additional supplies are available, ID4 banks water in KCWA's Pioneer Project and the Kern Water Bank.

Nickel Family LLC is a private company primarily invested in farming. Nickel was the owner of a pre-1914 Kern River Water Right, referred to as the Lower River Rights. KCWA recently purchased the Lower River Rights from Nickel, and as part of that purchase, Nickel is now supplied with 10,000 acre-feet of water per year by KCWA in the

California Aqueduct. Nickel will market this water to the highest bidder. Likely bidders are urban water agencies or power plants that need a dependable supply.



Figure 1. State Water Project Features

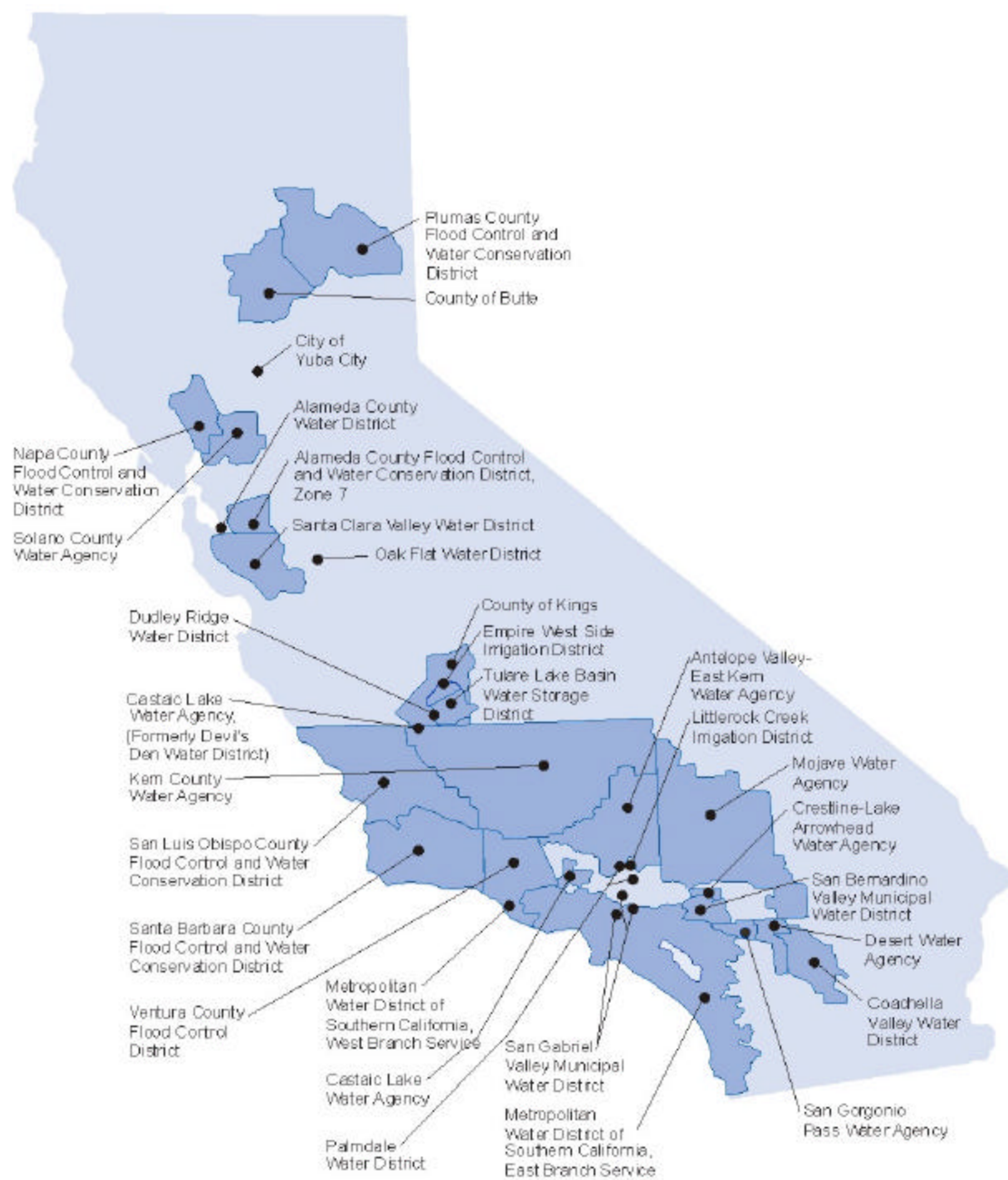


Figure 2. State Water Contractors

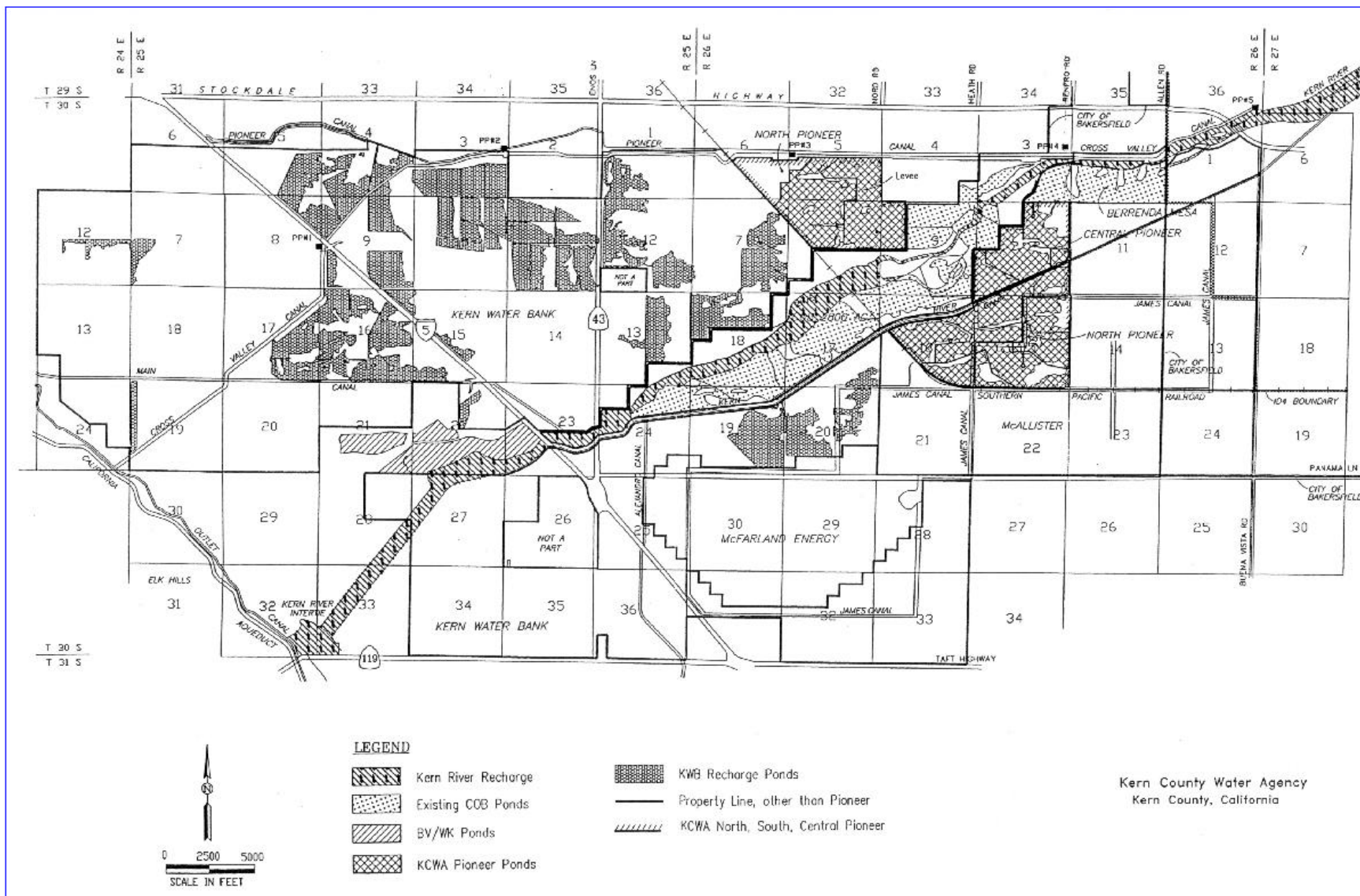


Figure 3. Kern County Water Agency groundwater recharge facilities
(modified from Plate "E" Kern County Water Agency 1996)

IV. ENVIRONMENTAL SETTING AND POTENTIAL ENVIRONMENTAL IMPACTS

The environmental setting and potential environmental impacts of this project are discussed below. The proposed project does not include any new construction of water facilities, infrastructure, or any other type of construction or land disturbance. The project, therefore, will not have any impact on cultural resources, hazards and hazardous materials, mineral resources, noise, transportation/traffic, and utilities and service systems. These categories are eliminated from the discussion below. Potentially affected environmental resources could include aesthetics, recreation, agriculture, air quality, biological resources, and water quality. These impacts are evaluated below and judged to be less-than-significant impacts. The proposed project is not expected to induce growth through greater water availability, so there should not be economic, land use and planning, population and housing or public services effects.

This Initial Study identifies the following levels of potential impacts for the proposed project. A less-than significant impact causes no substantial adverse change in the environment and requires no mitigation measures, whereas a significant impact may cause a substantial adverse change in the environment and would require implementing specific mitigation measures to reduce impact to a less-than-significant level. Potentially beneficial effects, defined as potential positive changes in the environment, are identified in the text if appropriate but are not shown on the checklist (Appendix C).

Aesthetics and Recreation

San Luis Reservoir and O'Neill Forebay accommodate activities such as swimming, boating, water-skiing, fishing, camping, and picnicking.

The groundwater recharge basins provide habitat for waterfowl and water birds and provide opportunities for bird watching.

Impacts: The project will not cause water levels in San Luis Reservoir or O'Neill Forebay to fluctuate beyond normal operating conditions and impacts to aesthetics and recreation will be less-than-significant. The delivery of purchased water to the department will involve either direct pump-back into the California Aqueduct or an exchange of SWP entitlement. The water purchased from KCWA will be used to reduce the demand for Delta water and to curtail pumping at the Banks Pumping Plant. Reduced deliveries into San Luis Reservoir from the Delta could be replaced with deliveries of groundwater from KCWA or with KCWA's SWP entitlement already stored in San Luis Reservoir and O'Neill Forebay.

Agricultural Resources and Economic Impacts

Over 600,000 acres⁹ of agricultural land is irrigated by water that is provided by the SWP. Crops include corn, winter wheat, walnuts, tomatoes, grapes, and rice. The SWP and KCWA manage water for industrial, municipal, and domestic uses as well.

⁹ Source: California State Water Project Atlas

Impacts: The project will continue the current level of reliability of water deliveries to SWP contractors and their water users while complying with environmental regulations. The capacity for groundwater supply for water users within KCWA's service areas will not be changed by implementation of the project. Storage of and delivery of EWA water by KCWA is subject to the water rights and needs of users within their service areas. The project does not require mitigation for agricultural or economic impacts.

Air Quality

The proposed project is within the Sacramento Valley and San Joaquin Valley air basins.

Impacts: The project will not significantly affect air quality. There are no construction activities under this project, and the groundwater pumps that would be used for actions associated with the project are electric. Levels in San Luis Reservoir and O'Neill Forebay will be within the range of normal operating conditions, and therefore, will not create additional dust problems to significantly affect air quality. Because pumping demands would be lower (see power section), increased emissions caused by the increased use of fossil fuels would not occur. The proposed water transfer does not require mitigation for air quality impacts.

Biological Resources - Fisheries

The analysis of impacts on fishery resources is focused on San Luis Reservoir, O'Neill Forebay, and the Delta.

San Luis Reservoir and O'Neill Forebay

The game fish found in San Luis Reservoir and O'Neill Forebay include largemouth bass, crappie, sunfish, striped bass and bullhead catfish. Fish production in San Luis Reservoir and O'Neill Forebay are generally limited by changes in water elevations during critical spawning periods, overall reservoir levels, and the availability of shallow near-shore rearing habitat.

Impacts: The project will not cause water levels in San Luis Reservoir and O'Neill Forebay to fluctuate beyond normal operating conditions and impacts to aesthetics and recreation will be less-than-significant. The delivery of purchased water to the department will involve either direct pump-back into the California Aqueduct or an exchange of SWP entitlement. The water purchased from KCWA will be used to reduce the demand for Delta water and to curtail pumping at the Banks Pumping Plant. Reduced deliveries into San Luis Reservoir from the Delta could be replaced with deliveries of groundwater from KCWA or with KCWA's SWP entitlement already stored in San Luis Reservoir and O'Neill Forebay. Fishery impacts will not be greater than those realized under normal operating conditions. Therefore, fishery impacts in San Luis Reservoir and O'Neill Forebay will be less-than-significant.

Delta

All anadromous fish of the Central Valley either migrate through the Delta to spawn and rear upstream or are dependent on the Delta to provide some critical part of their life cycle. Delta smelt, green sturgeon, and Sacramento splittail are special-status and sensitive species that reside in the Delta.

Impact: This project was developed cooperatively and in accordance with recommendations from NMFS, USFWS, and DFG. It is the intent of the EWA to have an overall benefit to Delta fisheries through its actions that exceed the regulatory baseline established by existing environmental agreements. Actions by the EWA in water-year 2001 to reduce pumping in the Delta during critical times for delta smelt, Sacramento splittail, juvenile winter-run, spring-run chinook salmon, and juvenile steelhead will reduce the cumulative level of mortality experienced by these species from Delta pumping when compared to the baseline conditions without the EWA Program. In the context of the overall EWA program, the project will have beneficial effects on Delta fisheries.

Biological Resources - Plants and Wildlife

Numerous special-status and sensitive plant and wildlife species occur in the San Joaquin Valley, such as San Joaquin antelope squirrel, giant kangaroo rat, San Joaquin kit fox, blunt-nosed leopard lizard, heartscale, and hispid bird's beak.

Impact: The project would not result in the development or cultivation of any native untillied land. Overall, there would not be any significant impacts on any vegetation or wildlife in the area affected by the project. There would be no adverse impacts on any state or federal special-status plant or animal species. This discussion incorporates by reference the Final Environmental Impact Report and Notice of Determination for the Artificial Recharge, Storage and Overdraft Correction Program, Kern County, California (Kern Water Bank) (Department of Water Resources 1986).

Energy and Power

The SWP hydroelectric facilities are part of the large multipurpose SWP encompassing such beneficial uses such as power production, flood control, irrigation water supply, municipal and industrial water supply, habitat for fish and wildlife, improved water quality, and recreation. The major factors in power plant operation are the required downstream releases, electric system needs, and project-use demand. The SWP has hydroelectric plants at Hyatt, Thermalito, Gianelli, Warne, Castaic, Alamo, and Devil Canyon. Energy generation at these plants in 1995 totaled 4,759,035 megawatt-hours (MWh).

Impact: The purchased water from KCWA would be acquired by EWA through an exchange of KCWA's SWP entitlement or through direct pump-back into the California Aqueduct. KCWA may have to increase groundwater pumping from their existing groundwater accounts to replace the foregone SWP entitlement or to move water into the California Aqueduct for delivery to the Department. The increased groundwater pumping to make use of the purchased water may increase KCWA's power consumption, but the level of consumption will be offset by reduced pumping by the Department at the Delta pumps. Rough estimates of energy use for the Kern Water Bank (as of January 2001) are 260 kWh/acre-foot to 300 kWh/acre-foot for groundwater pumping. This is approximately half the energy required to pump water from the Delta through the Banks Pumping Plant or San Luis Reservoir. Therefore, impacts to power from the water purchase will be less-than-significant.

Environmental Justice

The federal requirement for environmental justice refers to the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Executive Order 12898, signed by President Clinton in 1994, requires federal government agencies to consider the potential for their actions or policies to place disproportionately high adverse human health or environmental effects on minority and low-income populations. Potential effects related to environmental justice would be effects that disproportionately affected minority and low income populations.

Two State statutes were enacted to address State coordination and consultation requirements for Environmental Justice. These statutes, SB 115 (Solis) and SB 89 (Escutia) parallel federal mandates for environmental justice. SB 115 requires the Secretary for the California Environmental Protection Agency (CA EPA) to take specified actions in designing its mission for programs, policies, and standards within the Agency, and to develop a model environmental justice mission statement for boards, departments, and offices. SB 89 specifically requires the Secretary for CA EPA to convene a Working Group on Environmental Justice on or before January 15, 2002 to assist the CA EPA in developing an interagency environmental justice strategy.

Impact: This project will not disproportionately affect minority or low income populations since KCWA and the Department will structure the water transfer

agreement to insure that the demands of KCWA customers are met first before EWA water is guaranteed. In addition, KCWA groundwater sources and facilities would not be used to the extent that there would be environmental effects on rural agricultural populations.

Geology and Soils

San Luis Reservoir and O'Neill Forebay are not lined and are subject to erosion.

Impacts: There will be no construction or significant changes in water levels in San Luis reservoir that might result in seismic hazards or significant levels of erosion. All impacts on geology and soils as a result of the project are considered to be less than significant.

Water Resources

Surface Water

See the Project Location section of this document for a discussion of the environmental setting.

Impacts: Although SWP operations will be altered with implementation of the project, the levels in San Luis Reservoir and the California Aqueduct will not be outside the range of normal operating conditions. There will be no increased flooding risk since KCWA's flood control facilities, San Luis Reservoir, O'Neill Forebay, and the California Aqueduct will continue to maintain flood storage space for the duration of this agreement.

Groundwater

This water purchase is dependent upon existing groundwater accounts held under the Kern Water Bank and the Pioneer Groundwater Recharge and Recovery Project. A portion of the banked water is owned by Improvement District No. 4 and Nickel Family LLC in the form of banked SWP entitlement water and banked Lower Kern River water, receptively. KCWA will act on their behalf by entering into the purchase agreement and delivering or storing the water allocated to the Department.

Impacts: This discussion incorporates by reference the Final Environmental Impact Report and Notice of Determination for the Artificial Recharge, Storage and Overdraft Correction Program, Kern County, California (Kern Water Bank) (Department of Water Resources 1986). Most of the groundwater that is purchased by EWA will likely be extracted by KCWA for use in lieu of SWP entitlement. Secondly, the KCWA could deliver the water to EWA via the California Aqueduct. EWA will use the water in exchange for operational curtailment at Delta Pumps. This project will not cause significant adverse impacts to groundwater resources. There will not be subsidence impacts because ground water levels will be within their historic range. The KCWA and the

Department will structure the agreement to insure that the demands of the KCWA's customers are met first before EWA water is guaranteed. In addition KCWA will perform in a manner that is consistent with KCWA's historic irrigation practices. The KCWA is required to comply with the California Water Code and will avoid significant adverse impacts to groundwater, including water quality impacts (section 1732¹⁰).

The Department may also store all or a portion of the purchased water under existing groundwater storage agreements already in place for EWA. The impacts of storing EWA water as groundwater have been addressed in previous environmental documents (Department of Water Resources 2001) and impacts were found to be less-than-significant.

Water Quality

The Department monitors water quality to ensure that SWP water quality meets Department of Health Services drinking water standards and Article 19 Water Quality Objectives for long-term SWP contracts¹¹. The objective of the SWP water quality monitoring program is to maintain project water at a quality acceptable for recreation, agriculture, and public water supply for the present and future under a policy of multiple use of the facilities. These uses include fishing, boating, and water contact sports. The Department analyzes the water for physical parameters such as water temperature, specific conductance, and turbidity and more than 60 different chemical constituents including inorganic chemicals, pesticides, and organic carbon potential. The monitoring program has stations throughout the SWP including the O'Neill Forebay and San Luis Reservoir, the California Aqueduct and terminal reservoirs such as Silverwood Lake, Lake Perris, Pyramid Lake, and Castaic Lake.

KCWA delivers water for agricultural, industrial, and municipal purposes. Improvement District No. 4 supplies wholesale treated groundwater to retailers that serve the greater Bakersfield area within ID4's boundaries.

Before selling its Lower Kern River Water Right to KCWA, Nickel provided water for agricultural purposes. Now Nickel is provided 10,000 acre-feet per year by KCWA in the California Aqueduct (Aqueduct). KCWA will deliver groundwater to the Aqueduct or will provide Nickel with a portion of their SWP entitlement already in the Aqueduct. Nickel will be marketing this water to the highest bidder.

Impacts: This discussion incorporates by reference the Final Environmental Impact Report and Notice of Determination for the Artificial Recharge, Storage

¹⁰ CA Water Code, Section 1732. The petitioner shall not initiate or increase the use of groundwater to replace surface water transferred pursuant to this article, except in compliance with Section 1745.10 and 1745.11.

¹¹ Article 19 Objectives are included as standard provisions in the Department's water supply contracts. They require the collection and analysis of water quality samples in the SWP and the compilation of records. Article 19 (a) states: "It shall be the objective of the State and the State shall take all reasonable measures to make available, at all delivery structures for the delivery of Project water to the District, Project water of such quality that the following constituents do not exceed the concentrations stated." The constituents table is in Appendix D.

and Overdraft Correction Program, Kern County, California (Kern Water Bank) (Department of Water Resources 1986). The EWA is responsible for avoiding water quality impacts as required under the EWA Operating Principles. The quality of SWP surface water is relatively good. If ground water is used in lieu of Delta water to fulfil the entitlement of other SWP contractors, there could be a decrease in water quality. Any groundwater introduced into the California Aqueduct shall be in accordance with the State's water quality criteria for introduction of non-project water into the California Aqueduct. As a part of standard operations, the Department will monitor water quality to ensure that SWP water quality meets Department of Health Services drinking water standards and Article 19 Water Quality Objectives for long-term SWP contracts. KCWA is required to comply with the California Water Code when using groundwater in lieu of their SWP entitlement and will avoid adverse impacts from reduced water quality.

V. CUMULATIVE EFFECTS

Cumulative effects result from the incremental impact of the proposed water transfer when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or entity undertakes them. Cumulative effects can result from individually minor, but collectively significant, actions taking place over time. CALFED actions, Central Valley Project Improvement Act (CVPIA) actions, and ongoing SWP and CVP operations and actions, in particular, are all highly adaptable programs subject to substantial change as hydrologic, environmental, regulatory, and water supply conditions change. Because the proposed water transfer increases operational flexibility, analysis of cumulative effects must necessarily be speculative and general.

Ongoing operations of KCWA, SWP, CVP, and water contractors are complex and part of the affected environment. Both SWP and CVP are complex networks of reservoirs and delivery systems. SWP management decisions to provide water for SWP water contractors requires balancing water for irrigation and domestic water supplies, fish and wildlife protection, restoration and mitigation, power generation and meeting other water related standards. In developing operations decisions, both KCWA and the Department use criteria related to reservoir operations and storage, prevailing water rights and environmental requirements, flood control requirements, carryover storage objectives, reservoir recreation, power production capabilities, cold water reserves, pumping costs, contract requirements, and other factors. The possibility of using multiple water sources for some requirements and environmental opportunities adds flexibility to project operations and complexity to operations decisions.

The EWA is expected to make relatively small changes in the overall operations of the SWP and CVP facilities. Operational changes in water-year 2001 can be generally characterized as shifts in pumping rates at the SWP delta diversion pumps, shifts in the storage and release patterns at SWP reservoirs, shifts in groundwater pumping and storage patterns within the KCWA, and shifts in surface water storage release patterns among local and regional agencies. Certain operations related to EWA variable assets will be affected by precipitation. In wet and normal years, surface water will be the primary EWA asset and in dry years, groundwater will become the primary EWA asset and operations will shift accordingly.

The EWA will allow the further curtailment of Delta pumping to reduce the entrainment of fish at the SWP Banks pumping plant to achieve benefits beyond the existing environmental baseline. Pumping could increase when substantial impacts to sensitive fish are not likely, in order to move water controlled by the EWA. However, the final pumping pattern will remain within the possible patterns that the SWP is allowed under the existing SWRCB D-1641.

San Luis Reservoir storage will drop in response to EWA Delta export cuts or if the EWA delivers water out of San Luis Reservoir to repay debt from previous borrowing arrangements or to store water in groundwater banks. San Luis Reservoir storage will increase in response to higher Delta exports on behalf of the EWA or due to voluntary

shifts in delivery patterns, water purchases in the export area, exchanges, or source shifts. However, San Luis storage patterns will range within the patterns that the CVP and SWP already allow under existing operating conditions.

Purchases from the member units of the KCWA will generally lead to increased groundwater pumping in 2001, with recovery of groundwater levels in subsequent years. If the Department takes advantage of the opportunity to deposit water into groundwater storage, groundwater levels could rise in 2001 in KCWA aquifers. Withdrawal of stored water could take place either in 2001 or in subsequent years.

The nature of the EWA Program, specifically, acquisition of up to 385,000 acre-feet of water in the initial year from various sources, along with the regulatory framework currently in place, makes the potential for significant adverse cumulative impacts during 2001 implementation and over the life of the proposed program highly unlikely. Impacts are particularly unlikely for above normal water years. However, future EWA purchases in addition to drought management actions undertaken in below normal water years will need to be carefully managed to ensure future cumulative impacts do not occur. These future actions will be discussed in future CEQA documents and among the Governor's Drought Advisory Panel. The EWA Program is being implemented and will be adaptively managed to actually maintain and/or benefit both Delta fisheries and contractor water supplies. The goals of many of these related programs and projects are similar, and there are no significant cumulative impacts identified from the array of proposed projects. EWA will be using this first year of actions to fully monitor all effects of its program.

VI. MANDATORY FINDINGS OF SIGNIFICANCE

The project does not have the potential to significantly affect an environmental resource. Consequently, there are no mandatory findings of significance.

VII. MITIGATION MEASURES FOR ANY SIGNIFICANT EFFECTS

This project will not significantly affect any environmental resources. Consequently, there are no mitigation measures necessary or proposed.

VIII. CONSISTENCY WITH PLANS AND POLICIES

Coordination Operations Agreement

The Project Agencies shall continue to adhere to the general sharing principles contained in the 1986 Coordinated Operations Agreement (COA) as modified by interim operating agreements to reflect changes in regulatory standards, facilities, and operating conditions, including the EWA.

Kern County Water Agency

- California Water Code
- Kern Water Bank
- Pioneer Groundwater Recharge and Recovery Project

State Water Project

- South Delta Improvements
- Kern Water Bank
- Pioneer Groundwater Recharge and Recovery Project
- Department of Health Services drinking water standards
- Article 19 Water Quality Objectives for long-term SWP contracts
- 1993 Winter-run Chinook Salmon Biological Opinion (NMFS);
- Decision 1641, State Water Resources Control Board (SWRCB);
- 1995 Delta Smelt Biological Opinion (USFWS);

IX. CONSULTATION AND COORDINATION

This initial Study was prepared in consultation and coordination with applicable requirements. The Department is the Lead Agency responsible for the preparation of this Initial Study.

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APPENDIX A

Overview of Four Year EWA Program

The EWA was established to provide a supplemental water supply for the protection and recovery of fish beyond what currently exists through the pre-CALFED Program environmental baseline. The existing regulatory baseline¹² programs established to provide a level of fishery protection include:

- 1993 Winter-run Chinook Salmon Biological Opinion (NMFS);
- 1995 Delta Water Quality Control Plan, State Water Resources Control Board (SWRCB);
- 1995 Delta Smelt Biological Opinion (USFWS);
- management of the full 800,000 acre-feet of CVP Yield Pursuant to Section 3406(b)(2) (or (b)(2) Water) of the Central Valley Project Improvement Act (CVPIA) ; and
- other environmental protections, including Level 2¹³ refuge water supplies as required by the CVPIA.

Assets acquired for the EWA will vary from year to year depending on hydrologic and regulatory conditions, and are therefore not certain. As stated in the Introduction, the EWA will be implemented over four years. The initial water purchases and lease of groundwater storage will be secured by the Department from willing sellers by the end of 2000. The Project Agencies will enter into one-year contracts with the willing sellers. Several processes may be used to acquire EWA assets and/or functional equivalent sources of project water supply to offset the effects of operational curtailments under the EWA program so that deliveries will not be affected.

1. Acquisition of Water for the EWA

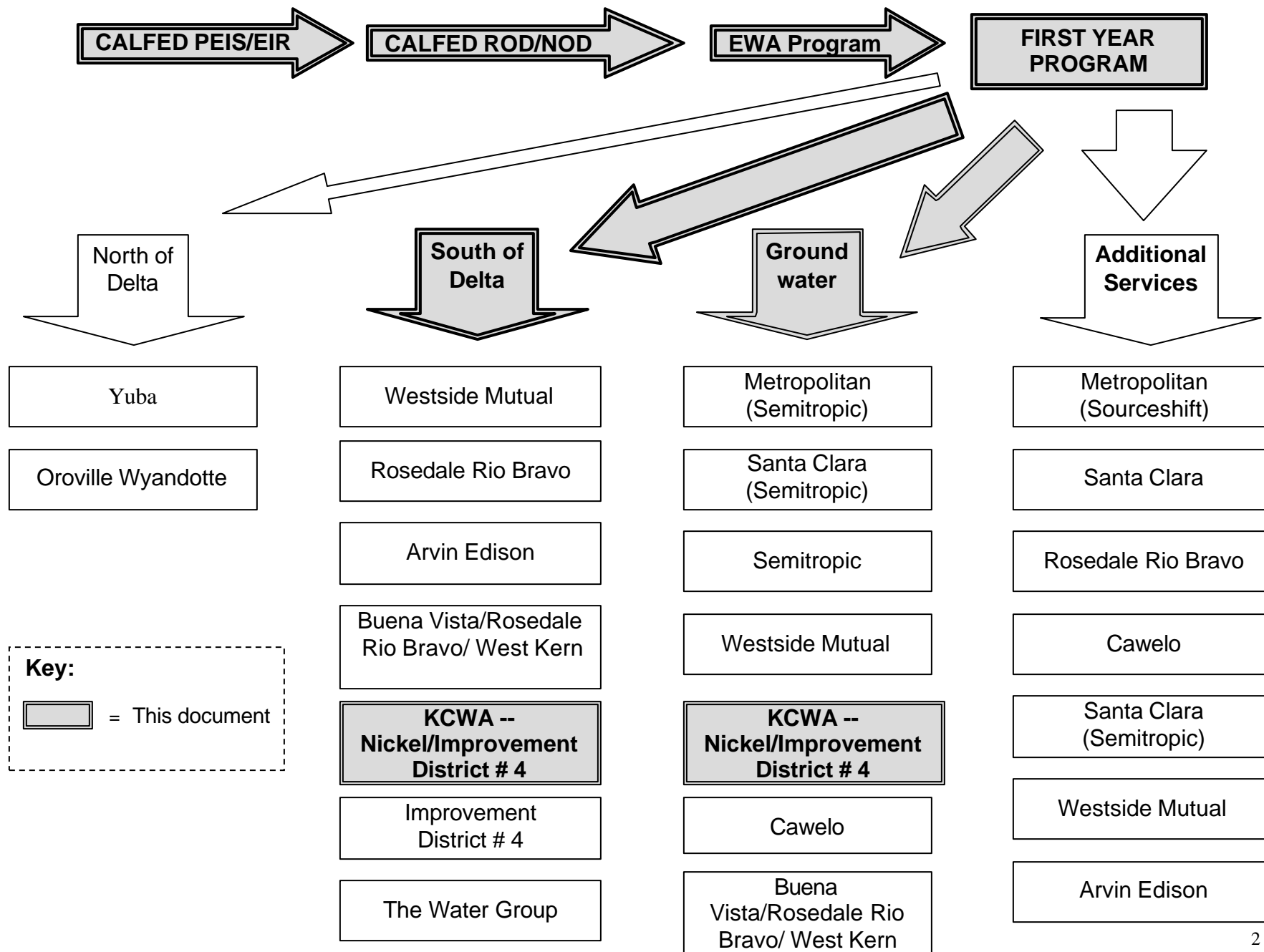
A. Proposed Purchases

The Department will use EWA funds to purchase EWA assets from willing sellers both north and south of the Delta. Purchases can include leases, options, long-term agreements, and any other property or contractual transaction that make alternative project supplies available south of the Delta or available for conveyance to south of the Delta. Purchases will also include the acquisition of storage space in groundwater basins

¹² If an operable EWA is not in place by December 31, 2000, then the existing regulatory baseline would remain in place.

¹³ Level 2 – The 1989 and 1992 Refuge Water Supply Studies define Level 2 refuge water supplies as the average amount of water the refuges received between 1974 and 1983.

Figure 1. EWA First Year Asset Acquisition



to bank EWA assets. The Management Agencies will identify assets to replace water lost to the projects due to operational curtailment, and to be pledged as collateral when the EWA borrows from the Projects. The Project Agencies will accept the asset if the collateral meets the agreed guidelines for borrowing. The release of the asset shall be in accordance with a schedule agreed to by both the Management Agencies and the Project Agencies. A tentative release schedule will accompany an identified asset. The Project Agencies will coordinate EWA water acquisition with Level 4¹⁴ refuge water acquisitions to ensure the priority accomplishment of both each year.

B. Delta Operations

Delta project operations will involve four mechanisms by which EWA water assets are acquired.

i. Sharing of (b)(2) and Ecosystem Restoration Program (ERP) Water Pumped by the SWP.

The SWP and the EWA will share, on a 50-50 basis, the lesser of:

- a) water released from storage or made available for upstream purposes under either CVPIA Section 3406(b)(2) or the Ecosystem Restoration Program (ERP) which arrives in the Delta with no further ERP or (b)(2) purposes to serve;
- b) water that exceeds the export capacity of the CVP Tracy pumping plant;
- c) water that the SWP and EWA have demanded south of the Delta; and
- d) water the SWP has capacity to pump.

ii. Joint Point¹⁵: SWP Wheeling of CVP and EWA water.

The SWP will use excess capacity at its Harvey O. Banks Pumping Plant to pump water for both the CVP and the EWA, to be shared between them on a 50-50 basis. The CVP water could be either from storage or from its Delta water rights to divert unstored water. The EWA water could be either from non-project water acquired north of the Delta or stored or unstored water pumped under CVP or SWP water rights. If either the CVP or EWA is demand-limited¹⁶, the other's use of joint point will not count against its 50 percent share.

¹⁵ The term joint point is used here to refer primarily to the use of the SWP point of diversion alone, and specifically, to the wheeling of EWA as well as CVP water.

¹⁶ Demand-limited – A project is demand-limited in no contractors want any more water than they are currently receiving and if available storage facilities and/or conveyance facilities are full.

The relative priority of use of excess capacity at Banks for the EWA water and any CVP and Level 4 refuge water¹⁷ is currently being determined.

iii. SWP Appropriation of Unregulated Flow.

The SWP may use its Delta diversion rights to pump water from the Delta for EWA purposes when the demand for SWP supplies is less than supply. The SWP diversion rights would be used in cases where Joint Point could also be used but where it would be preferable to create EWA assets south of the Delta to offset SWP rather than CVP losses to operational curtailments. As an adjunct to Joint Point, it would simply utilize SWP rather than CVP water rights to pump excess flows for the EWA's share. It would not affect the CVP's own share of excess SWP capacity.

iv. Project Pumping made Possible by Regulatory Relaxation

(a) Relaxation of the Section 10 Constraint

The SWP is limited under Section 10 of the Rivers and Harbors Act¹⁸, pursuant to US Army Corps of Engineers (Corps) Public Notice 5829-A, to a three-day average rate of diversion of water into Clifton Court Forebay of 13,250 acre-feet per day. This is equal to an average, around the clock diversion rate of 6,680 cfs. This rate may be increased during winter months when the San Joaquin River flow is above 1,000 cfs.

The Corps granted permission to the SWP to increase the base diversion rate by the equivalent of 500 cfs to an average of 7,180 cfs for the months of July through September, through 2002. This 500 cfs will be dedicated to pumping for the EWA.

(b) Relaxation of the Export/Inflow Ratio

Under D-1641¹⁹, and anticipated under the SWRCB order to be issued upon completion of the Bay-Delta water rights hearing, project exports are limited at different times of the year to a certain percentage of

¹⁷ Level 4 – Level 4 refuge water supplies are defined in the 1989 and 1992 Refuge Water Supply Studies as the amount of water for full development of the refuges based upon management goals developed in the 1980s.

¹⁸ Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the Army Corps of Engineers. Under Section 10, the Corps regulates projects or construction of structures that could interfere with navigation. A department of the Army permit is needed to construct any structure on any navigable water of the United States, to excavate or deposit material in such waters, or to do any work affecting the course, location, condition, or physical capacity of such waters.

¹⁹ D-1641-The State Water Resources Control Board issued Decision 1641 on December 29, 1999. The order requires DEPARTMENT and the USBR maintain their respective outflow standards until November 30, 2001 or until the Board adopts a further decision during its water rights hearings. It is currently in litigation, but DEPARTMENT continues to voluntarily comply with the standards.

Delta inflow (usually 35 or 65 percent). This limitation is called the Export/Inflow, or E/I ratio. Both D-1641 and the 1995 Water Quality Control Plan, consistent with the 1994 Principles for Agreement (Bay-Delta Accord), allow for these ratios to be relaxed upon the meeting of certain requirements. Relaxation of the E/I ratio will be sought as appropriate and used to create EWA assets south of the Delta. By relaxing the E/I ratio, up to 20 TAF could be exported for the EWA. This water would be exported by the SWP and held in San Luis Reservoir for later use.

2. Banking of EWA Assets

A. Generally

Banking is the storage of water for later use that otherwise would be used or lost in the present. Water can be banked and used within the same water year or carried over for use in a subsequent water year. Even though the acquisition of stored water does not carry the idea of converting a transitory asset into a durable asset, it is included here as an EWA banking transaction as well as a specific EWA asset acquisition. Like the acquisition of assets, banking transactions must provide for access to and the release of the stored EWA assets to the projects.

Priority of EWA assets in storage generally will trigger the provisions of the banking document. Unless the Management Agencies and the Project Agencies make other arrangements, EWA assets will have a lower priority for storage in project reservoirs than regular project storage and thus will spill first. Regular project storage includes reservoir operations for project purposes, such as flood control, downstream temperature control, minimum downstream flows for fish, regulatory requirements, and contract water supply including contractor carryover water. Usually, if imported water is physically stored in a groundwater basin, the storing agency will have a first and exclusive right to the water stored.

B. Banking in Project Reservoirs

EWA assets may be stored or “banked” in project reservoirs upstream of the Delta as well as in San Luis Reservoir, provided the Projects do not incur any additional adverse operational impacts. The EWA will share this lower storage priority with water acquired for Level 4 refuge needs. The Project and Management Agencies shall jointly establish reasonable and practical standards for determining when an EWA asset may be stored and when it would spill or be lost from upstream project storage.

Banking EWA water south of the Delta will be important because it creates highly reliable assets which are both durable and which may be released without Delta constraints being an issue.

C. Groundwater Banking

At times, the EWA may bank surface water within existing groundwater banks to prevent loss by spilling from project reservoirs. Usually, if imported water is physically stored in a groundwater basin, the storing agency will have a first and exclusive right to the water stored.

D. Source-Shifting Agreements

The purpose of water banking is to have water available for use at a time other than its original availability. Source-shifting agreements fall under this functional definition of “banking”. Source-shifting agreements are executed with a water agency that is able, at certain times, to call on non-Delta water sources to temporarily create an asset for use by the EWA. In these cases, the water agency is agreeing to a reduction in deliveries so these assets can be used for EWA operational curtailments. Replacement of the source-shifted water occurs at a mutually agreed upon time with the water agency without any incremental impacts to the Projects.

A source-shifting agreement with The Metropolitan Water District of Southern California (MWDSC) is an example of such a banking arrangement. MWDSC will provide 100 to 200 TAF to be used to enhance the effectiveness of the EWA, and to help provide assurance that SWP and CVP water deliveries and operations will not be affected by EWA operations.

3. Borrowing

Borrowing agreements will allow the EWA to borrow water from the CVP and SWP for fish protection during a water year as long as the water can be repaid without affecting the current or following year's allocations. Borrowing of project water, specifically water in San Luis Reservoir, is intended to enhance the effectiveness and use of EWA assets. Project water in San Luis Reservoir may be borrowed to support an operational curtailment in lieu of immediately releasing an EWA asset when the borrowed water is not needed at that time to make project deliveries. Borrowing can only take place when the borrowed water would not create or exacerbate water quality and supply problems associated with the San Luis low point, and it meets reasonable carryover storage objectives.

An appropriate EWA asset will be pledged to assure that, if the borrowed water is not otherwise made up, release of the pledged asset will cause project deliveries not to be affected by the borrowing transaction.

4. Transfers Using Delta Conveyance

Transfers will be used to create assets south of the Delta out of assets upstream of the Delta. They can also be used to make acquisitions south of the Delta suitable for

release to project use, where a change in the legal place or purpose of use or point of diversion of the water is needed.

APPENDIX B

Overview of First Year EWA Operation

In the year 2001, the EWA expects to make relatively small changes in the overall operations of the SWP, the CVP, and certain local and regional water agencies. The EWA is expected to have available to it certain “assets”, defined by the ROD/Notice of Determination (NOD) (see Table 1). Any subsequent reference in this document to the ROD includes the EIS/EIR and NOD.

While the EWA is under no obligation to utilize each of the assets to the maximum extent possible, it could do so. Also, the actual asset mix generated for the EWA could vary somewhat from the nominal values, provided that substitute actions are functionally equivalent to the actions replaced. For example, the EWA might purchase less than 150,000 acre-feet of water south of the Delta and more than 35,000 acre-feet of water North of the Delta, if the year 2001 is a dry year.

The Department, USFWS, NMFS, and the California Department of Fish and Game are currently working on purchase, storage (including water), and source shifting agreements, called for in the ROD. Table 2 shows the maximum asset that could be acquired for the first year using State of California funds and facilities. The table also reflects the goals for each area targeted by the ROD.

Table 1. Maximum EWA Assets

Action Description	Water Available Annually (Average)
SWP Pumping of (b)(2)/ERP Upstream Releases ²⁰	40,000 acre-feet ²¹
EWA Use of Joint Point ²²	75,000 acre-feet
Export/Inflow Ratio Flexibility	30,000 acre-feet
500 cfs SWP Pumping Increase	50,000 acre-feet
Purchases – South of Delta	150,000 acre-feet
Purchases – North of Delta ²³	35,000 acre-feet
TOTAL	380,000 acre-feet
Storage acquisition	200,000 acre-feet of storage, filled; acquired in Year 1 ²⁴
Source Shifting agreement	100,000 acre-feet

²⁰ The EWA and the SWP will share equally the (b)(2) and ERP upstream releases pumped by the SWP after they have served their (b)(2) and ERP purposes.

²¹ The amount of water derived from the first four actions will vary based on hydrologic conditions.

²² The EWA will share access to joint point, with the CVP receiving 50% of the benefits.

²³ This is the amount of water targeted for the first year; higher amounts are anticipated in subsequent years. North of Delta assets assume a twenty percent carriage loss. The actual maximum quantity of water acquired will be approximately 45 TAF.

²⁴ Of the 200 TAF, 100 TAF would be retrievable within the year.

As stated in the ROD, immediate development of assets for the first year (January 1, 2001 – December 31, 2001) is critical to EWA success. Initial water purchases, lease of groundwater storage, and surface water storage will be secured from willing sellers by December 31, 2000. In addition to the assets to be acquired annually, as shown in Table 1, an initial one-time deposit of water equivalent to 200 TAF of south-of-Delta storage is proposed to be acquired from a variety of sources to assure the effectiveness of the EWA and provide assurances for SWP and CVP water supplies/deliveries. With EWA assets in place, pumping at SWP Delta export pumps will be reduced during critical periods for chinook salmon, delta smelt, splittail, or other fishery resources, at the discretion of the fishery agencies.

To acquire all assets listed in Table 1 in 2001, the EWA will rely on the operation of the SWP and the facilities of certain local and regional water agencies. Implementation of the EWA in the first year will not involve changes to the operation of the CVP, use of federal facilities, or use of federal funds. Therefore, the first year operation will be implemented as a state only action. Actions characterized by purchases, storage acquisitions, and source shifting agreements require a negotiated agreement between EWA and participating local and regional water agencies. Agreements that have been or are being negotiated for the acquisition of assets in 2001 are given below. Each agreement will be evaluated individually under CEQA. This Initial Study evaluates the Kern County Water Agency (Nickel Family LLC/Improvement District No. 4) water purchase agreement, and the description of other assets is included here as background information. Through these agreements, EWA will acquire only the amount of water that is needed and may not purchase all of the water offered.

Proposed Purchases South of Delta

- Agencies within Kern County Water Agency (KCWA): Up to 200 TAF will be made available from Westside Mutual, Rosedale Rio Bravo WSD, West Kern WD, Improvement District 4, Buena Vista WSD and Cawelo to the SWP for distribution either through exchange or direct groundwater pumping.
- Arvin-Edison Water Storage District: From 5 to 10 TAF will be made available through exchange or direct groundwater pumping.

Proposed Purchases North of Delta

- Yuba County Water Agency (YCWA): Yuba County Water Agency may release up to 50 TAF in 2001 during June 15 through August 31 for recovery by the EWA in the Delta via SWP pumps. The water would come from storage in New Bullards Bar Reservoir.
- Oroville-Wyandotte Irrigation District: Oroville-Wyandotte may release up to 10 TAF of water into Lake Oroville for use by the EWA.

Proposed Storage Acquisitions

- Agencies within KCWA: BVWSD, RRB, WSD, WKWD, Westside Mutual, MWDSC (Semitropic) and Santa Clara Valley Water District (Semitropic) have offered to allow the EWA to deposit approximately 200 TAF of water into groundwater storage from December 2000 through mid-2001 or direct percolation.
- Arvin-Edison WSD: Arvin-Edison has offered to allow the EWA to deposit from 5 to 10 TAF of water into groundwater storage from December 2000 through mid-2001 or direct percolation.
- Santa Clara Valley Water District (SCVWD): SCVWD may take early delivery of up to 20 TAF of water and store it within its local system allowing the SWP to reduce delivery of a comparable volume of entitlement water later in the year.

Proposed Source Shifting Agreement

- The Metropolitan Water District of Southern California (MWDSC): MWDSC would defer 100 TAF to 200 TAF of its 2001 deliveries from the SWP from January through August 2001. Dependent upon water year type and mutual agreement of Department and MWDSC, initial water would be returned in 2001 and 2002. MWDSC will rely upon local storage to buffer the changed delivery pattern.

Table 2. EWA Asset Acquisition Targeting the ROD (in TAF)

North of Delta Goal (35 TAF)			South of Delta Goal (150 TAF)			Groundwater Assets GW Storage/Extraction (200/100 TAF)			Additional GW or GW Equivalent		
	Dry	Wet		Dry	Wet		Dry	Wet		Dry	Wet
Yuba	50	50	EWA Water in San Luis from CVP ²⁵	72	72	MWD (Semitropic)	32/0	32/0	MWD Source Shift Base	100	100
Oroville – Wyandotte	10	0	Westside Mutual 2000 purchase	15	15	Santa Clara (Semitropic)	30/30	30/0	MWD Source Shift Wet	0	0
			Rosedale Rio Bravo 2000 purchase	19	19	Westside Mutual	50/20	50/0	Deposit to Rosedale GW	0	20
			Arvin Edison 2000 Exchange/Purchase	10	10	Cawelo	10/5	10/0	Deposit to Santa Clara GW	0	10
			Arvin Edison 2001 Exchange/Purchase	10	10	Buena Vista/ Rosedale Rio Bravo/ West Kern	25/25	0/0	Westside Mutual	0	18
			Westside Mutual 2001 wet only purchase	0	55	Semitropic	20/10	20/0	Cawelo	0	10
			Buena Vista Water Storage District/ Rosedale Rio Bravo Water Storage District/ West Kern Water District	0	35						
			Kern County Water Agency -- Nickel/ Improvement District No. 4	10	15						
			Improvement District No. 4 - 2001	10	15						
Subtotal	60	50		136	236		162/90	142/0			
Carryover Credit				13	5			91/91			
Carriage Losses	12	10									
TOTAL	48	40	TOTAL	159	251	TOTAL	162/80	233/91	TOTAL	100	158
Carryover credit to next category:	13	5			91						

²⁵ See USBR Letter to USFWS, September 21, 2000 (Appendix E)

APPENDIX C

Environmental Checklist Form

1. Project title: Water Purchase agreement between Kern County Water Agency and the California Department of Water Resources for the Environmental Water Account
2. Lead agency name and address:

California Department of Water Resources
3251 "S" Street
Sacramento, CA 95816

3. Contact person and phone number:

Delores Brown (916) 227-2407

4. Project location: Sacramento and San Joaquin Valley.

5. Project sponsor's name and address:

Department of Water Resources
3251 "S" Street
Sacramento, CA 95816

6. General plan designation: N/A

7. Zoning: N/A

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

See Initial Study, Project Description.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

See Initial Study, Environmental Setting.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

California Department of Fish and Game, State Water Resources Control Board

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources		Cultural Resources		Geology /Soils
	Hazards & Hazardous Materials		Hydrology / Water Quality		Land Use / Planning
	Mineral Resources		Noise		Population / Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities / Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

✓	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Dolores Brown
Signature

March 8, 2001
Date

Barbara J. McDonnell
Signature

March 8, 2001
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were

incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				✓
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				✓
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				✓
e) Create objectionable odors affecting a substantial number of people?				✓
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				✓
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in ? 15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to ? 15064.5?				✓
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓
d) Disturb any human remains, including those interred outside of formal cemeteries?				✓
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				✓
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?				✓
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				✓
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				✓
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
VII. HAZARDS AND HAZARDOUS MATERIALS ? Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✓
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				✓
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				✓
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				✓
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				✓
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				✓
f) Otherwise substantially degrade water quality?			✓	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?				✓
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓
XI. NOISE ? Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				✓
b) Exposure of persons to or generation				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
of excessive groundborne vibration or groundborne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				✓
Fire protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				✓
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
e) Result in inadequate emergency access?				✓
f) Result in inadequate parking capacity?				✓
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				✓
XVI. UTILITIES AND SERVICE SYSTEMS ? Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project? s projected demand in addition to the provider? s existing commitments?				✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project? s solid waste disposal needs?				✓
g) Comply with federal, state, and local statutes and regulations related to solid waste?				✓
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				✓
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

APPENDIX D

Article 19 Objectives for Water Quality Parameters

Parameter	Units	Article 19 Objective		
		Monthly Average	10 Year Average	Maximum
Arsenic	mg/L	110	55	0.05
Boron				0.6 ²⁶
Chloride				
Hexavalent Chromium				0.05
Copper				3.0
Fluoride				1.5
Iron + Manganese				0.3
Lead				0.1
Selenium				0.05
Sodium				
Total Dissolved Solids	% ²⁷	50	40	
Total Hardness as CaCO ₃	mg/L	440	220	
Zinc	mg/L	180	110	15

²⁶ Monthly Average

²⁷ Percentage of cationic composition

APPENDIX E

Letter From USBR to USFWS Entitled:

**Informal Consultation And Request For Concurrence
With Determination Of Not Likely To Adversely Affect
For Proposal To Use Water Acquired From Kern Water
Bank Authority For The Environmental Water Account**

MP-410
ENV-1.10

SEP 21 2000

MEMORANDUM

To: Field Supervisor, U.S. Fish and Wildlife Service, Sacramento CA
Attention: Wayne White

From: John F. Davis
FOR **MR. CHARLES B. JOHNSON JR.**
Regional Resources Manager

Subject: Informal Consultation and Request for Concurrence with Determination of Not Likely
to Adversely Affect for Proposal to Use Water Acquired from Kern Water Bank
Authority for the Environmental Water Account

In May 2000, Reclamation finalized an Environmental Assessment/Finding of No Significant Impact for the *Temporary Water Acquisition in Support of Bureau of Reclamation Water Year 2000-2003 Operations* that included a concurrence by the U.S. Fish and Wildlife Service that the proposed action of acquiring 72,000 acre-feet of water is not likely to adversely affect listed species. Referring to your memorandum dated May 19, 2000, this concurrence was conditional that if the acquired water were to remain in San Luis Reservoir after February 28, 2001, Reclamation would consult with the U.S. Fish and Wildlife Service on any future use of the water. Reclamation has determined that the acquired water may remain in storage at San Luis Reservoir past the above indicated date for use by the Environmental Water Account (EWA), once the EWA becomes operational. Reclamation has the ability to use this water until June 30, 2001, the period for which the State Water Resources Control Board action is approved. Although it is possible that the EWA may expend the 72,000 acre-feet prior to February 28, 2001, it is almost certain that this EWA asset will be expended before June 30, 2001. In either case the use of this EWA asset is to benefit listed species. No changes in use from those already documented in the referenced environmental assessment will occur. For these reasons, Reclamation has determined that this proposal is not likely to adversely effect any listed species nor adversely modify any designated critical habitat.

2

We would appreciate your written concurrence with our finding within 30 days upon receipt of this letter. Please contact Mary Johannis, our EWA Program Manager at (916) 978-5202 (TDD 978-5608) if you have any questions.

Thank you for your ongoing assistance with this project.

cc: Field Supervisor, U.S. Fish and Wildlife Service, Sacramento CA

Attention: Joel Miller

Endangered Species Division, U.S. Fish and Wildlife Service, Sacramento CA

Attention: Peter Cross

bc: MP-150, 400, 410